

Listing of Claims

1. (Cancelled)
2. (Currently amended) The method of claim 5, [[1]] wherein: the conductivity is less than 80 micro mhos/cm.
3. (Currently amended) The method of claim 5, [[1]] wherein: the conductivity is less than 50 micro mhos/cm.
4. (Currently amended) The method of claim 5, [[1]] wherein: the conductivity is less than 30 micro mhos/cm.
5. (Currently amended) A method for preparing silica containing molecular sieves which may be mixed with an organic polymer to create a mixed matrix membrane, the method comprising:
water washing silica containing molecular sieves sufficiently to produce water washed molecular sieves which are substantially free of surface remnants, such that when the water washed molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 110 micro mhos/cm;
~~The method of claim 1 further comprising: a step of washing the silica containing molecular sieves with a basic water solution having a pH of at least 9 prior to the water washing step.~~
6. (Original) The method of claim 5 wherein: the basic water solution has a pH of at least 11.

7. (Currently amended) The method of claim 5, [[1]] wherein: the water washing is performed continuously until the silica containing molecular sieves are substantially free of the surface remnants.
8. (Currently amended) The method of claim 5, [[1]] wherein: the water washing is performed batch wise until the silica containing molecular sieves are substantially free of the surface remnants.
9. (Currently amended) The method of claim 5, [[1]] further comprising: calcining the silica containing molecular sieves after the step of water washing has produced sieves which are substantially free of surface remnants.
10. (Currently amended) The method of claim 5, [[1]] further comprising: silanating the water washed silica containing molecular sieves.
11. (Original) A mixed matrix membrane comprising:
a continuous phase organic polymer and water washed silica containing molecular sieves which are dispersed throughout the polymer;
wherein the water washed silica containing molecular sieves are sufficiently water washed to remove surface remnants prior to being dispersed into the organic polymer such that if the water washed silica containing molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 110 micro mhos/cm.
12. (Original) The mixed matrix membrane of claim 11 wherein: the water washed silica containing molecular sieves are sufficiently water washed to remove surface remnants prior to being dispersed into the organic polymer

such that if the water washed silica containing molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 80 micro mhos/cm.

13. (Original) The mixed matrix membrane of claim 11 wherein: the water washed silica containing molecular sieves are sufficiently water washed to remove surface remnants prior to being dispersed into the organic polymer such that if the water washed silica containing molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 50 micro mhos/cm.
14. (Original) The mixed matrix membrane of claim 11 wherein: the water washed silica containing molecular sieves are sufficiently water washed to remove surface remnants prior to being dispersed into the organic polymer such that if the water washed silica containing molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 30 micro mhos/cm.
15. (Previously presented) The mixed matrix membrane of claim 11 wherein: the water washed silica containing molecular sieve is silanated prior to being dispersed with the organic polymer.
16. (Original) A method of making a mixed matrix membrane, the method comprising the steps of:
water washing silica containing molecular sieves sufficiently to produce water washed molecular sieves which are substantially free of surface remnants, such that when the water washed molecular sieves are subjected to a Sieve Wash Conductivity Test, a wash filtrate is produced having a conductivity of less than 110 micro mhos/cm;

dispersing the water washed molecular sieves into a solvated organic polymer; and
allowing the organic polymer to dry thereby creating a mixed matrix membrane comprising an organic polymer with the water washed molecular sieves dispersed therein.

17. (Original) The method of claim 16 wherein: the wash filtrate has a conductivity of less than 80 micro mhos/cm.
18. (Original) The method of claim 16 wherein: the wash filtrate has a conductivity of less than 50 micro mhos/cm.
19. (Original) The method of claim 16 wherein: the wash filtrate has a conductivity of less than 30 micro mhos/cm.
- 20 - 23. (Cancelled)
24. (New) The method of claim 16, further comprising the step of washing the silica containing molecular sieves with a basic water solution having a pH of at least 9 prior to the water washing step.
25. (New) The method of claim 16, further comprising the step of calcining the water washed silica containing molecular sieves.
26. (New) The method of claim 16, further comprising the step of silanating the water washed silica containing molecular sieves.